## TORNADOES IN MICHIGAN IN MAY, 1930

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On the morning of May 2, 1930, much destruction occurred in Michigan due to tornadoes. Outside of Grand Rapids severe local storms, evidently tornadic in character, were reported in many places in the westcentral portion of the State. These occurred between 2 and 3 a.m. eastern standard time. A map is inclosed indicating points where destruction occurred. It is evident that there were at least a half-dozen tornadoes, traveling in nearly parallel paths, the paths varying in width from a few rods to 1 mile and the length from 25 miles to 75 miles. The general direction of these paths was east-northeastward and they were in some cases only 5 or 6 miles apart. Several places where destruction occurred were visited by employees in this office and there were numerous evidences that the storms were true tornadoes. The débris from buildings was scattered in various directions and in a number of instances timbers were driven into the ground 18 inches and more and at various angles. In most cases the destruction occurred on higher elevations, the storms passing over adjoining low areas without causing damage.

Hail was reported in and near the paths of the storms in a majority of cases. The usual terrific roar was mentioned by a number of people in the storm paths and a few observed a funnel cloud, although, there were not many who so reported, probably due to the hour that the storms occurred. Thunder and lighting prevailed during the storms and several buildings were damaged by lightning. Many farm animals were killed, but no loss of human life resulted and very few injuries were reported.

Damage in the city of Grand Rapids has already been estimated at \$1,000,000. It is believed that the damage elsewhere in the State exceeded \$200,000.

May 13, 1930.—On the afternoon of May 13, about 3 p. m. eastern standard time, a severe storm did considerable damage in Clinton County, Mich. The storm originated in the western portion of the county, near Westphalia. It traveled east-northeast and disappeared near Ovid, Mich., covering a distance of about 25 miles. The path was unusually wide, exceeding one-half mile over a portion of the route. The storm passed over open country where buildings were scattered, missing towns and villages, A total of 32 farm barns were wrecked, a number of residences damaged and many smaller buildings destroyed, one concrete milk house being picked up and carried about five rods. A portion of the loss was due to the destruction of valuable timber and a number of orchards were completely uprooted. The storm was tornadic in character. Many persons observed the funnel-shaped cloud and the resulting débris showed the characteristic distribution due to the revolving motion of the storm. Maple trees with trunks 2 feet and more in diameter were splintered and twisted, making a complete turn and more.

Heavy hail occurred in connection with the storm. Hail stones as large as walnuts and hen's eggs were reported. The usual deafening roar and the attending heavy thunder and lightning were commented on by many persons in the vicinity.

This storm traveled over a portion of the same path that a previous tornado followed on March 28, 1920, and some of the same buildings were damaged by both storms. The total loss was estimated as exceeding \$200,000.

May 23, 1930.—On the afternoon of May 23 a tornado did considerable damage in Michigan. The storm ap-

parently originated in the north-central portion of Isabella County and traveled northeastward across portions of Clare, Gladwin, and Ogemaw Counties. It passed through the town of Clare and also through portions of the towns of Gladwin and West Branch. The storm was reported to be one-half to 1 mile wide and about 70 miles in length. The storm exhibited the typical characteristics of a tornado, lifting off roofs of buildings, twisting off trees and windmills, and scattering débris in all directions along its path. Several persons reported

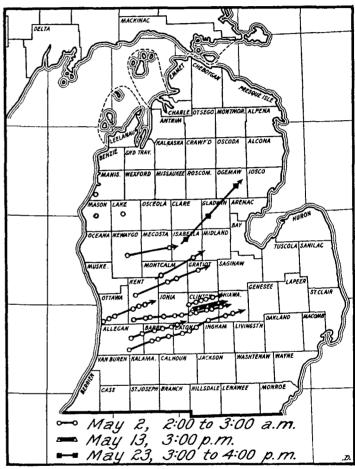


FIGURE 1.—Approximate tracks of the Michigan tornadoes of May 2, 13, and 23, 1930

seeing the usual funnel cloud. Many barns, silos, and other structures were leveled to the ground and the total damage to property was estimated at \$250,000. A few persons were injured, but none was killed. A number of farm animals were lost.

Very little hail attended this storm, although some was

reported in the vicinity of Clare.

The storm originated about 1:30 p. m. and reached the end of its path about 3:10 p. m. About one-half hour later some damage occurred near Hubbard Lake and Alpena, Mich., which is about 40 miles northeast from the last damage caused by the "twister" and apparently on about the same line extended. The damage in the later section was reported to have been caused by a straight blow or "line squall."

The approximate paths of the several tornadoes are

shown in Figure 1.